

Claims

1. An apparatus for handling toxic and infectious fluid waste comprising:
 - (a) a collection chamber adapted to receive fluid waste from a
5 source thereof, the collection chamber having a fluid inlet port, a fluid outlet port and a vacuum port adapted to be connected to a negative pressure source;
 - (b) means for producing an electrical signal that fluid waste in the collection chamber has reached a predetermined level;
 - (c) a microprocessor-based controller coupled to receive the
10 electrical signal for controlling the discharge of the fluid waste from the collection chamber and for storing data relating to the volume of fluid waste discharged from the collection chamber.
2. The apparatus as in claim 1 and further including a display panel
15 coupled to the microprocessor-based controller for visually displaying said data.
3. The apparatus as in either claim 1 or claim 2 and further including a solenoid valve mechanically coupled in series with the fluid outlet port and electrically coupled to the microprocessor-based controller, actuation of the solenoid valve by the
20 microprocessor-based controller discharging fluid waste from the collection chamber.
4. The apparatus as in claim 3 and further including a measuring chamber having an inlet port mechanically connected in series with the solenoid valve, the measuring chamber further having an outlet port coupled through a further solenoid
25 valve to a sewer line, the further solenoid electrically coupled to the microprocessor-based controller.
5. The apparatus as in either claim 1 or claim 2 and further including a positive displacement pump coupled to the fluid outlet port of the collection chamber,
30 the pump being driven by a motor controlled by the microprocessor-based controller to

deliver fluid waste to a disposal site.

6. The apparatus as in claim 5 wherein the microprocessor-based controller computes the volume of fluid waste pumped by said positive displacement pump.

7. An apparatus for handling toxic and infectious fluid waste, comprising:

(a) a collection chamber adapted to receive fluid waste from a source thereof, the collection chamber having a fluid inlet port and a fluid outlet port;

(b) a measuring chamber having a fluid inlet and a fluid outlet;

(c) a first electrically operated valve disposed between the fluid outlet port of the collection chamber and the fluid inlet of the measuring chamber;

(d) a second electrically operated valve disposed between the fluid outlet of the measuring chamber and a sewer line; and

(e) a microprocessor coupled to receive input signals from the measuring chamber for determining a total volume of fluid waste flowing from the collection chamber and through the measuring chamber during a predetermined period of time, said microprocessor providing control signals to the first and second electrically operated valves for controlling the opening and closing thereof.

8. The apparatus as in claim 7 and further including a first alphanumeric display coupled to the microprocessor for indicating said total volumes.

9. The apparatus as in claim 7 wherein the collection chamber has a fluid inlet port coupled by tubing to an end effector and a vacuum adapted to be connected to a vacuum source.

10. The apparatus as in claim 9 and further including a pressure sensor disposed in the collection chamber, the pressure sensor providing an input to the microprocessor and a second alphanumeric display driven by the microprocessor for

providing a visual display of a pressure within the collection chamber.

11. The apparatus as in claim 10 and further including a housing for containing said collection chamber, said measuring chamber, said microprocessor and said first and second electrically operated valves.

12. The apparatus as in claim 11 wherein the first and second alphanumeric displays are visible through openings formed in the housing.

13. The apparatus as in claim 9 and further including a baffle disposed in the collection chamber for preventing liquid waste from flowing through the vacuum port.

14. The apparatus as in claim 8 and further including a data entry device coupled to the microprocessor.

15. The apparatus as in claim 14 wherein the data entry device is a keypad.

16. The apparatus as in claim 14 wherein the data entry device is a bar code reader.

17. The apparatus as in claim 11 wherein the housing has a window formed therein allowing viewing of the contents of at least one of the collection chamber and the measuring chamber.